

SOV/136-58-11-9/21

Study of the Behaviour and Recovery of Rhenium in the Roasting of
Molybdenite Concentrates in a Fluidized-Bed Roaster

the fluidized roaster, compared with 50% for the rotary kiln but the existing dust-catching system involved 79.5% loss of rhenium in the waste gases. A bubbler (fig.1) installation type VSPU designed by Gintsvetmet which could deal with part of the gas was tested and found to be 89-96% efficient with respect to rhenium, most (75-92%) of the quantity trapped being in the form of soluble compounds; the losses of liquid from the bubbler were shown to be due to evaporation rather than mechanical entrainment. Removal of pulp from the bubbler is recommended when pulp acidity becomes 30-60 g/litre and rhenium concentration 0.15 - 0.30 g/litre. The installation is recommended by the authors. The Mintsvetmetzoloto large laboratory fluidized roaster (fig.2) was used to study the behaviour of rhenium and its recovery in the roasting of low-grade molybdenite concentrates (20.5% Mo, 17.5% S (total), 18.31% SiO_2 , 4.06% Cu,

Card 2/3

SOV/136-58-11-9/21

Study of the Behaviour and Recovery of Rhenium in the Roasting of Molybdenite Concentrates in a Fluidized-Red Roaster
1.60% CaO, 7.16% Fe, 0.21% W, 0.04% Re) at 590-630°C and an air velocity in the stack of 8-9 cm/sec (giving an hourly productivity of 75-80 kg/m² of hearth area). A materials balance (table 3) for a 12 hour run shows that the method is successful with such concentrates; the distillation of rhenium being 93.2% of the quantity in the concentrate. There are 2 figures and 3 tables.

Card 3/3

S/697/61/000/000/004/018
D228/D303

AUTHORS: Zelikman, A. N., Bibikova, V. I., Petrov, V. M., Post-
nikova, S. V., Abashin, G. I., Pritulo, V. F. and Niki-
tina, L. N.

TITLE: Study of the behavior and recovery of rhenium during the
roasting of Kadzhara and Koundrad molybdenite concen-
trates in a boiling layer

SOURCE: Akademiya nauk SSSR. Institut metallurgii im. A. A. Bay-
kova. Institut mineralogii, geokhimii i kristalloghimii
redkikh elementov. Mezhdunarodnaya komissiya po
redkim metallam. Vsesoyuznoye soveshchaniye po probleme
reniya. Moscow, 1958. Reniy; trudy soveshchaniya. Mos-
cow, Izd-vo AN SSSR, 1961, 42-50

TEXT: The authors present the results of their study of: (a) the
distribution of Re in the products obtained from roasting Kadzhara
molybdenite concentrates in a boiling-layer furnace, (b) the re-
covery of Re from waste gases of a boiling-layer furnace by means

Card 1/3

Study of the behavior ...

S/697/61/000/000/004/018
D228/D303

as compared with only 50 - 67% in muffle and rotary tubular furna-
ces. 2) The existing dust-collection system of the boiling-layer
furnace does not guarantee a satisfactory degree of Re extraction;
since the loss of metal in waste gases amounts to about 80%. The
lowering of the temperature of the Cottrell filter to 55 - 80° does
not reduce this loss on account of the condensation of H_2SO_4 . 3)

Much better results can be obtained with the bubbling unit, and the
bubbler's efficiency with respect to Re is stated to equal 89 - 96%.
75 - 92% of the metal in the bubbler pulp is in solution, and the
concentration of dissolved Re rises as the duration of the bubbling
lengthens. It is recommended that the pulp be removed from the bubb-
ler when the Re concn. and acidity of the solution is 0.15 - 0.3 and
30 - 50 g/l respectively. 4) The high degree of Re sublimation (92-
93.2%) from the ash of Koundrad concentrate shows that the same
technique can also be applied to this material; there is no diffe-
rence in the behavior of Re during the roasting of both concentra-
tes and the processing of their gaseous products in the bubbling
unit. There are 3 figures and 4 tables. / Abstracter's note: p.48
of the photostat copy is illegible. /
Card 3/3

FEDOROV, P.I.; POSTNIKOVA, S.V.; STIFIYENKO, L.A.

Solubility in the system potassium perrhenate - potassium chloride -
water. Zhur.neorg.khim. 7 no.7:1670-1674 J1 '62. (MIRA 16:3)

S/081/62/000/014/017/039
B166/B144

AUTHORS: Bibikova, V. I., Postnikova, S. V., Oleynikova, K. V.

TITLE: Methods of producing high-purity rhenium

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 14, 1962, 380, abstract
14K70 (Sb. "Renyi". M., AN SSSR, 1961, 75 - 80)

TEXT: To remove Pb, Sn and other impurities from metallic rhenium it is suggested that the pressed powder be vacuum-heated under a residual pressure of $1 \cdot 10^{-4}$ mm Hg, at a temperature of 2500°C for 2 hrs. The purity of the metal so obtained was 99.988% with respect to 13 impurities (Fe, Al, Mo, Cu, Ni, K, Na, Ca, Pb, Sn, Cd, Bi, Sb). In order to reduce the K and Ca content the metallic Re was produced from ammonium perrhenate. The Re contained 0.02% K and 0.009% Ca. A method is suggested for producing high-purity rhenium containing $<0.0001\%$ of each of the impurities Pb, Sn, Cd, Bi, Se which it is required to limit. [Abstracter's note: Complete translation.] ✓

Card 1/1

S/078/62/007/007/009/013
B117/B101

AUTHORS: Fedorov, P. I., Postnikova, S. V., Stifiyenko, L. A.

TITLE: Examination of solubility in the system potassium perrhenate - potassium chloride - water

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 7, 1962, 1670 - 1674

TEXT: Studies of the system KReO_4 - KCl - H_2O at 0, 25, 50, and 75°C showed the solubility isotherms to consist of two branches. The branch which corresponds to the crystallization of potassium perrhenate showed only one solid phase, namely anhydrous KReO_4 . The very small crystallization branch of KCl was not studied. KReO_4 was found to be salted out by KCl , an effect which increases as the temperature is lowered. An addition of 10% by weight of KCl to the solution reduces the solubility of KReO_4 at 75°C to 1/5 and at 0°C to 1/32. Complete separation of KReO_4 could not be achieved at 75°C. Although the solution was saturated with KCl , it still contained 0.35% of KReO_4 . At 0°C, the separation of KReO_4 was practically
Card 1/2

L 23877-65 EWT(m)/EPF(n)-2/EWP(t)/EWP(b) Pu-4 IJP(c) JD/JB/MLK

ACCESSION NR: AT5002754

S/0000/64/000/000/0036/0039

AUTHOR: Postnikova, S. V.; Bibikova, V. I. (Doctor of technical sciences); Fedorov, P. I.

TITLE: Physicochemical principles of the hydrometallurgical method of rhenum re-
fininf

SOURCE: Vsesoyuznoye soveshchaniye po probleme reniya. 2d. Moscow, 1962. Reniy (Rhenium); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 36-39

TOPIC TAGS: rhenum, rhenum refining, hydrometallurgical refining, molybdenum
concentrate, calcium molybdate, potassium perhenate

ABSTRACT: The authors studied the system $\text{Ca}(\text{ReO}_4)_2 - \text{CaMoO}_4 - \text{H}_2\text{O}$ at 20 and 75C by the isothermal method for the purpose of elucidating the degree and nature of the trapping of rhenum by the precipitate formed as a result of the neutralization of acidic molybdenum concentrates with calcium oxide. It was found that when molybdenum is precipitated by calcium oxide, rhenum and molybdenum coprecipitate until the latter has completely separated, and rhenum is thought to enter into the crystal lattice of calcium molybdate. After the precipitation of the latter,

Card 1/2

L 23877-65

ACCESSION NR: AT5002754

0

the trapping of rhenium is due to adsorption processes. The experiments elucidated the general nature of the distribution of rhenium during the precipitation of calcium molybdate. In addition, the authors investigated the conditions of maximum separation of rhenium when it is precipitated in the form of potassium perrhenate by potassium chloride. To this end, they studied the equilibria in the ternary systems $KReO_4 - KCl - H_2O$ at 0, 25, 50, and 75°C, and $NH_4ReO_4 - NH_4Cl - H_2O$ at 0, 25, and 75°C by the solubility method (under isothermal conditions). On the basis of this investigation, optimum technological conditions were selected for the process of rhenium refining. Orig. art. has: 2 figures.

ASSOCIATION: None

SUBMITTED: 05Aug64

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Card 2/2

POSTNIKOVA, V.D., mladshiy nauchnyy sotrudnik

Characteristics and hygienic evaluation of ultraviolet irradiation
of living quarters. Gig.i san. 25 no.7:3-8 JI '60.

(MIRA 14:5)

1. Iz Instituta obshchey i kommunal'noy gigiyeny imeni A.N.
Sysina AMN SSSR.

(ULTRAVIOLET RAYS) (SANITATION, HOUSEHOLD)

POSTNIKOVA, V.M., kand.med.nauk

"Result of treatment and prophylaxis of deformities of the spine
in children" by A.A.Pod"iapol'skaia, A.V.Uvarova. Reviewed by
V.M.Postnikova. Vop.kur., fizioter. i lech. fiz. kul't. 28
no.2:179 Mr-Ap '63. (MIRA 16:9)

(SPINE--ABNORMITIES AND DEFORMITIES)
(EXERCISE THERAPY)

(POD"IAPOL'SKAIA, A.V.) (UVAROVA, A.V.)

*

POSTNIKOVA, V. M.

AGGEYEV, P.K., prof.; ANDREYEVA-GALANINA, Ye.TS., prof.; BASHENIN, V.A.,
prof.; BELIENSON, M.Ye., doktor med.nauk; VYSHEGORODTSEVA, V.D.,
prof.; GESSEN, A.I., dotsent; GUTKIN, A.Ya., prof.; ZHDANOV, D.A.,
prof., laureat Stalinskoy premii; ZNAMENSKIY, V.F., prof.;
KLIONSKIY, Ye.Ye., prof.; MONASTYRSKAYA, B.I., prof.; MOSKVIN,
I.A., prof.; MUCHNIK, L.S., kand.med.nauk; PETROV-MASLAKOV, M.A.,
prof.; RUBINOV, I.S., prof.; RYSS, S.M., prof.; SMIRNOV, A.V.,
prof., zasluzhennyy deyatel' nauki; TIKHOMIROV, P.Ye., prof.;
TROITSKAYA, A.D., prof.; UDINTSEV, G.N., prof.; UFLYAND, Yu.M.,
prof.; FEDOROV, V.K., prof.; KHILOV, K.L., prof., zasluzhennyy
deyatel' nauki; VADKOVSKAYA, Yu.V., prof.; MARSHAK, M.S., prof.;
PETROV, M.A., kand.med.nauk; POSTNIKOVA, V.M., kand.med.nauk;
RAPOPORT, K.A., kand.biolog.nauk; ROZENTUL, M.A., prof.; YANKE-
LEVICH, Ye.I., kand.med.nauk; LYUDKOVSKAYA, N.I., tekhn.red.

[Book on health] Kniga o zdorov'e. Moskva, Gos.izd-vo med.lit-ry,
Medgiz, 1959. 446 p.
(MIRA 12:12)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for
Zhanov, Udintsev). 2. Leningradskiy sanitarno-gigiyenicheskiy me-
ditsinskiy institut (for all, except Vadkovskaya, Marshak, Petrov,
Postnikova, Rapoport, Rozentul, Yankelevich, Lyudkovskaya).

(HYGIENE)

NESMEYANOV, A.N., akademik; DROZD, V.N.; SAZONOVA, V.A.; POSTNOV, V.N.

Some properties of diazo compounds of ferrocene. Dokl. AN SSSR
159 no.6:1334-1337 D '64 (MIRA 18:1)

1. Moskovskiy gosudarstvennyy universitet.

ACCESSION NR: AT4014056

S/3073/63/000/000/0283/0289

AUTHOR: Postnikov, V. S.; Gorshkov, G. A.

TITLE: Investigation of cyclic strength of metals by the method of internal friction

SOURCE: Prochnost' metallov pri peremennykh nagruzkakh; materialy* tret'yego soveshchaniya po ustalosti metallov, 1962 g. Moscow, Izd-vo AN SSSR, 1963, 283-289

TOPIC TAGS: cyclic strength, metal strength, metal fatigue, internal friction, fatigue failure, microfissure, metal crystal, microcrack

ABSTRACT: The cyclic strength of metals and the phenomenon of their fatigue failure have been investigated over a period of more than 100 years. As a result, physical evidence has been obtained to construct a general theory of fatigue failure. Although a firmly established point of view does not exist with regard to fatigue failure, at the present time three phases in the formation of a fatigue fracture can be noted. The first phase is connected with the strengthening of crystals unfavorably oriented with respect to the field of acting forces and with the occurrence of subtle sliding in these crystals. In the second phase, loosening begins to take place in some crystallites. The nature of this loosening is thoroughly understood but some authors conceive this loosening takes the form of dispersed ruptures of interatomic ties. Others believe that this loosening results in the

Card 1/4

ACCESSION NR: AT4014056

appearance of microfissures during the second phase. In the third phase, the development of the loosening process results in micro- and macro-cracks of fatigue. The authors have tried to clarify the physical picture of the different phases of fatigue failure, particularly the early stages of this process. Fatigue tests have been made on aluminum (99.98%), cadmium (99.9%), zinc (99.99%), and Cd-Zn alloys (0.5, 2.95, 10, and 17.4% Zn). All test specimens were 100mm long bars of a section $0.4-1\text{mm}^2$, and were annealed before the tests. Internal friction was measured by a device designed on the principle of a torsional pendulum. As a measure of inner friction, the logarithmic decrement divided by π has been used. Zero-to-maximum axial cyclic deformation was imposed by a generator of mechanical oscillations GMK-1, fed by an alternating current from a sound generator GZ-2. Torsional fully reversed loading was imposed by a special device. The influence of cyclic deformation in axial zero-to-maximum tension and in reversed torsion was determined on: (1) the temperature dependence of internal friction; and (2) the internal friction at constant temperature. The influence of intermediate annealing was also determined in some experiments. The rate of change in internal friction and the number of cycles to failure were correlated. In the case of the Cd-Zn alloys, these values were plotted against the zinc content in the alloy. As a result of the investigations it has been noted that, independently of the type of cyclic deformation, its influence noticeably increases the internal friction during the first cyclic range (corresponding to the first phase of the formation of a fatigue

Card 2/4

ACCESSION NR: AT4014056

failure) at low temperatures (20-300C for aluminum), and sharply increases the internal friction at high temperatures (above 0.6 of the melting point). This has been explained by an increase in the number of inner defects in the crystal structure. The increase in internal friction discontinues when the number of defects reaches a maximum value attainable under the given conditions. At this stage the loosening of the metal structure begins, explained by coagulation of vacancies. The resulting formation of micro-pores and micro-fissures does not increase the internal friction, and corresponds to the second phase. During the third phase in which micro-fissures develop into fatigue cracks, the internal friction is slightly increased. The investigations into changes in internal friction of metals under cyclic loading, depend on the number of cycles, test temperature, annealing temperature, and the alloy content, have somewhat clarified the question of the physical character of fatigue failure phases. The observed sensitivity of internal friction to the influence of cyclic deformation proves that subtle physical changes occur during the first phase of fatigue failure. Systematic investigations of $Q^{-1}(N, T)$ should be conducted to discover these changes. It is necessary to continue the study of correlations established by the authors between the rate of change of inner friction and the cyclic strength of metals and alloys. Orig. art. has: 4 figures.

ASSOCIATION: None

Card 3/4

ACCESSION NR: AT4014056

SUBMITTED: 00

SUB CODE: MM

DATE ACQ: 20Feb64

NO REF SOV: 013

ENCL: 00

OTHER: 006

4/4

Card

POSTNIKOVA, Ye.

Right course. Zamladelie 26 no.12:23 D '64.

(MIRA 18:4)

1. Zaveduyushchaya Pushkinskoy kontrol'no-semennoy laboratoriyey.

POSTNIKOVA, Ye.

Method of one cow feeding several calves demonstrated at
the Exhibition of Achievements of the Soviet National
Economy. Nauka i pered.op.v sel'khoz. 9 no.11:36 N '59.
(MIRA 13:3)

1. Starshiy sootekhnik-methodist pavil'ona "Krupnyy rogatyy
skot" Vystavki dostizheniya narodnogo khozyaystva.
(Calves--Feeding and feeds)
(Moscow--Agricultural exhibitions)

POSTNIKOVA, Ye. D.

"Study of the Rate of Mutation in *Drosophila melanogaster*
Populations According to Season," Dok. AN, 58, No. 5,
1947;

"Mutation and Lethal Concentration in Various Seasons
in the Reproduction of a Population," ibid. 60, No. 6,
1948.

POSTNIKOVA, YE. D.

PA 67T67

USSR/Medicine - Flies

May 1948

Medicine - Heredity, Mechanism

"Mutation and Lethal Concentration in Various Seasons
in the Reproduction of a Population," Ye. D. Postni-
kova, 3 pp

"Dok Ak Nauk SSSR, Nov Ser" Vol LX, No 6

Data obtained during studies conducted on the appear-
ance of lethal mutation in the X-chromosomes for in-
dividual *Drosophila melanogaster* was collected during
various seasons and from two different populations.
Submitted by Academician I. I. Shmal'gauzen 23 Mar
1948.

FDB

67T67

POSTNIKOVA, YE D.

PA 38T69

USSR/Medicine - Heredity
Medicine - Flies

Nov 1947

"Study of the Rate of Mutation in *Drosophila Melanogaster* Populations According to Season," Ye. D. Postnikova, 24 pp

"Dok Ak Nauk" Vol LVIII, No 5

General discussion on the relationship of the rate of mutation in native populations of *Drosophila melanogaster* to seasons. Author conducted experiments in an attempt to substantiate his theory to the effect that complex heterogeneity can be considered similar to mutation in completely different populations. Submitted by Academician N. V. Tsitsin, 18 Apr 1947.

FDB

38T69

POSTNIKOVA, Ye.I., zootekhnik

Engineer of a live shop. IUn. nat. no.8:21 Ag '62. (MIRA 15:9)
(Cattle)

PAVLOVA, T.D.; POSTNIKOVA, Ye.K.

Inflammatory complications in patients with cancer of the cervix
uteri following preoperative irradiation. Med.rad. 9 no.9:30-33
S '64. (MIRA 18:4)

1. Ginekologicheskoye otdeleniye Khar'kovskogo instituta medi-
tsinskoy radiologii i kafedra onkologii (zav. - prof. S.I.
Pavlenko) Ukrainskogo instituta usovershenstvovaniya vrachey.

POSTNIKOVA, YE. N.

Postnikova, Ye. N. and Rabukhin, A. Ye. and Kumak, G. M. - "The use of streptomycin in pulmonary tuberculosis", Trudy Akad. med. nauk SSSR, Vol. II, 1949, p. 43-53.

SO: U-4329, 19 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 21, 1949).

POSTNIKOVA, Ye. N.

"Results of the Use of Streptomycin on Patients With Pulmonary Tuberculosis." Cand Med Sci, Clinical Tuberculosis Division of the Therapeutic Sanitation Administration of the Kremlin, Moscow, 1953. (RZhBiol, No 8, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556 24 Jun 55

POSTNIKOVA, Ye.N.; ZOLIN, G.A.; MARINA, L.V.; NAVRATEL', Z.A., SHEVE-
LEVICH, L.M.; SHOR, M.S. (Moskva)

Effectiveness of streptomycin and PAS in treating pulmonary tu-
berculosis. Prob.tub.no.4:42-46 J1-Ag '55. (MLRA 8:10)

(TUBERCULOSIS, PULMONARY, ther.

PAS & streptomycin)

(SALICYLIC ACID, ther. use

tuberc.pulm. with streptomycin)

(STREPTOMYCIN, ther. use

tuberc.,pul.,with PAS)

POSTNIKOVA, Ye.N.

Shortcomings in the formula for calculating the oxidisability of
water. Gig. i san. 21 no.11:88 N '56. (MLRA 10:2)

1. Iz Minskogo meditsinskogo uchilishcha no.1.
(WATER--ANALYSIS) (OXIDATION)

MOROZOVA, L.N.; DOKUCHAYEVA, Z.Ye.; ZOLIN, G.A.; KULAKOVA, A.A.; NAVRATel',
Z.A.; POSTNIKOVA, Ye.N.; SHOR, M.S. (Moskva)

Effectiveness of prolonged combined antibacterial therapy of pulmo-
nary tuberculosis. Klin.med. 37 no.12:75-82 D '59.

(MIRA 13:4)

1. Iz IV glavnogo upravleniya pri ministerstve zdavookhraneniya
SSSR (nauchnyy rukovoditel' - prof. A.Ye. Babukhin).
(TUBERCULOSIS)

MOROZOVA, L.N.; DOKUCHAYEVA, Z.Ye.; ZOLIN, G.A.; KULAKOVA, A.A.;
NAVRATEL', Z.A.; POSTNIKOVA, Ye.N. (Moskva)

Late results of antibacterial treatment of pulmonary
tuberculosis. Klin. med. 40 no.12:32-36 D '62.
(MIRA 17:2)

1. Iz 1-y i 2-y polikliniki IV Glavnogo upravleniya pri
Ministerstve zdравookhraneniya SSSR (nauchnyy rukovoditel' -
prof. A.Ye. Rabukhin).

GRINBERG, A.A., akademik; POSTNIKOVA, Ye.S.

Instability constants of geometrically isomeric platodiamines.
Dokl. AN SSSR 153 no.2:340-341 N '63. (MIRA 16:12)

1. Leningradskiy tekhnologicheskii institut im. Lensoveta.

BELOV, I. V.; POSTNIKOV, Yu. D.

Heat condition parameters and the aerodynamics of an open-hearth furnace fuel spray. Izv. vys. ucheb. zav.; chern. met. 7 no.6:156-166 '64. (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki.

POSTNIKOVA, Z.

SMIRNOV, B., geroy Sovetskogo Soyuz; PROTCHEV, V., geroy Sovetskogo Soyuz; ZAMYCHKIN, S., geroy Sovetskogo Soyuz, sportsmen 1-go razriada; SEMEL'NIKOVA, A., geroy Sovetskogo Soyuz, sportsmen 1-go razriada; KOMAROV, A., geroy Sovetskogo Soyuz, sportsmen 1-go razriada; PONOMARENKO, Ya., geroy Sovetskogo Soyuz, sportsmen 2-go razriada; KHLOPTSEV, I., geroy Sovetskogo Soyuz, sportsmen 2-go razriada; SOKOLOVSKIY, A., geroy Sovetskogo Soyuz, sportsmen 2-go razriada; POSTNIKOVA, Z., geroy Sovetskogo Soyuz, sportsmen 1-go razriada.

Make a sport model jet airplane; letter to the editor. Kryl.rod.
6 no.1:8 Ja '55. (MLRA 8:3)

(Jet planes)

POSTNIKOVA, Z. A.

USSR/Medicine - Tumors, Papilloma
Medicine - Sulfanilamide and Derivatives

Mar/Apr 1948

"The Effect of Some Sulfamine Preparations on the Dynamics of Development of Virus Papilloma (Shope Papilloma) in Rabbits," N. A. Krotkina, Lab of Exogenous Cancerogenous Substances, Inst of Oncol; Z. A. Postnikova, Sukhumi Biosta, Acad Med Sci USSR, 8 pp

"Arkhir Patologii" Vol X, No 2

Tabulates results of experiments with rabbits showing that certain sulfamine preparations visibly retard the development of virus papilloma, and its malignancy. Submitted 1947.

PA 66T85

POSTNIKOV, Z. A.

N. N. Petrov, N. A. Krotkina, A. V. Vadovaya, and Z. A. Postnikovaya, co-authors of "Dynamics of the Genesis and Formation of a Malignant Growth in Experiments on Monkeys."

SO: [REDACTED]

oh

Vestnik Akademii Nauk SSSR, No 3, 1954, p 43

VADOVA, A.V.; POSTNIKOVA, Z.A.; CHISTOVA, N.M.

Effect of the karyoklastic poison of colchicine on retardation
of growth and malignitification of viral papillomas in rabbits.
Vop.onk.1 no.1:32-41 '55. (MLRA 8:10)

1. Iz laboratorii eksperimental'noy onkologii (nauchnyy rukovo-
ditel'--deystv.chl.AMN SSSR prof. N.M.Petrov) Sukhumaskoy mediko-
biologicheskoy stantsii AMN SSSR(direktor--doktor med.nauk G.Yu.
Malis)

(NEOPLASMS, experimental,
rabbit papilloma)

(PAPILLOMA, experimental,
rabbit papilloma, eff. of colchicine)

POSTNIKOVA, Z.A.

VADOVA, A.V.; POSTNIKOVA, Z.A.; CHISTOVA, N.M.

Effect of disorder of innervation on growth of viral papillomas
in rabbits. Vop.onk. 1 no.2:14-21 '55. (MLRA 8:10)

1. Iz laboratorii eksperimental'noy onkologii (nauchn.rukovod.
deystv.chl.AMN SSSR. prof. N.N.Petrov) Sukhumskey mediko-bio-
logicheskoy stantsii AMN SSSR (dir. d-r med.nauk G.Yu.Malis)
(PAPILLOMA, experimental,
rabbit papilloma, eff. of denervation of ear on develop.)
(NEOPLASMS, experimental,
rabbit papilloma, eff. of denervation of ear on develop.)

POSTNIKOVA, Z.A.

Immunizing properties of the blocked virus of Chaube's papilloma.
Vop. onk. 2 no.1:84-86 '56 (MLRA 9:4)

1. Iz otdela virusologii (zav. otdelom-deystvitel'nyy chlen AMN
SSSR professor L.A. Zil'ber) Instituta epidemiologii i mikrobiologii
imeni N.F. Gamaleya (dir.-deystvitel'nyy chlen AMN SSSR professor
G.V. Vygodchikov)
(NEOPLASMS, experimental
blocked virus of Chaube's papilloma, immunizing properties)

PETROV, N.N. (Leningrad, ul. Saltykova-Shchedrina, d. 41, kv. 1); KROTKINA, N.A.; BARABADZE, Ye.M.; VADOVA, A.V.; GEL'SHTEYN, V.I.; MEL'NIKOV, R.A.; POSTNIKOVA, Z.A.; SMOYLOVSKAYA, E. Ya.

Results of 18 years of work at Sukhumi on experimental carcinogenesis in monkeys. Vop.onk. 4 no.6:643-655 '58. (MIRA 12:1)

1. Iz laboratorii eksperimental'noy onkologii Sukhumskogo instituta patologii i terapii (b. Pitomnik obes'yan i medbiostantsiya) (nauchnyy rukovod. - prof. N.N. Petrov).

(NEOPLASMS, experimental,

result of 18 year work on carcinogenesis in monkeys
(Rus))

POSTNIKOVA, Z.A.

Method of intracardiac injection of newborn mice and rats.
Vop. virus. 5 no. 1:111-112 Ja-F '60. (MIRA 14:4)

1. Otdel immunologii i onkologii Instituta epidemiologii i
mikrobiologii imeni N.F. Gamalei, Moskva.
(INJECTIONS) (HEART)

POSTNIKOVA, Z.A., ABBLEV, G.I., TSVETLOV, V.S., KROKHINA, M.I. (USSR)

Isolation of the Specific Antigens of Neoplastic and Normal Tissues by Methods of Preparatory Immunelectrophoresis and Immunofiltration.

report presented at the 5th Int'l.
Biochemistry Congress, Moscow, 10-16 Aug. 1961

ABELEV, G. I.; ~~SHRAMKOVA~~, N. I.; POSTNIKOVA, Z. A.

The antigenic structure of mouse hepatomas. I. Organ-specific antigens of the liver and immuno-electrophoretic study of their occurrence in hepatomas. Neoplasma 9 no.2:125-130 '62.

1. Iz otdela immunologii i onkologii, Instituta epidemiologii i mikrobiologii im. N. F. Gamaleya AMN, Moskva, SSSR.

(HEPATOMA immunol) (NEOPLASMS immunol)

ENGELHARDT, N.V.; KHRAMKOVA, N.I.; POSTNIKOVA, Z.A.

Antigenic structure of mouse hepatomas. IV. Study of the liver organospecific antigen in the liver and hepatomas with fluorescent antibodies. Neoplasma 10 no.2:133-142 '63.

1. Department of Immunology and Oncology, N.F. Gamaleya Institute of Epidemiology and Microbiology of the U.S.S.R. Academy of Medical Sciences, Moscow, U.S.S.R.

(HEPATOMA)	(NEOPLASMS, EXPERIMENTAL)	(ANTIGENS)
(LIVER)	(FLUORESCENT ANTIBODY TECHNIC)	

KHRAMKOVA, N.I.; POSTNIKOVA, Z.A.; ABELEV, G.I.

Antigenic structure of mouse hepatomas. III. A study of the organo-specific liver antigens in the hepatomas with the aid of monospecific antibodies. Neoplasma 10 no.2:127-131 '63.

1. Department of Immunology and Oncology, N.F. Gamaleya Institute of Epidemiology and Microbiology of the U.S.S.R., Academy of Medical Sciences, Moscow, U.S.S.R.

(HEPATOMA)	(NEOPLASMS, EXPERIMENTAL)	(ANTIGENS)
(IMMUNOELECTROPHORESIS)	(LIVER)	

ABELEV, G.I.; PEROVA, S.D.; KHRAMKOVA, N.I.; POSTNIKOVA, Z.A.; IRLIN, I.S.

Alpha globulin of embryonic serum and its synthesis by transplanted
hepatomas in mice. Biokhimiia 28 no.4:625-634 J1-Ag '63.
(MIPA 18:3)

1. Institut epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR, Moskva.

POSTNOV, A., kand.tekhn.nauk

Use of electronic computer machines in river transportation.

Rech.transp 21 no.4:17-18 Ap '62.

(MIRA 15:4)

(Inland water transportation)

(Electronic digital computers)

IVLIYEVA, A., kand.ekoncm.nauk; PGSTNOV, A., kand.tekhn.nauk;
TAMBERG, D., kand.tekhn.nauk

Technical and economic grounds for new roader types.
Rech. transp. 21 no.12:23-24 D '62. (MIRA 15:12)
(Merchant ships—Cost of operation)

POSTNOV, A.A.

Manufacture of visual aids in geometry by school workshops. Uch. zap.
CHGPI 3 no.3:79-86 '62. (MIRA 18:5)

Subject : USSR/Aeronautics - education AID P - 5137
Card 1/1 Pub. 135 - 22/26
Author : Postnov, A. A., Guards Col. Hero to the Soviet Union
Title : To organize societies of military science in Air Force combat units.
Periodical : Vest. vozd. flota, 10, 86, 0 1956
Abstract : It is recommended by the author that societies of military science should be organized in the Air Force combat units.
Institution : None
Submitted : No date

POSTNOV, A.A.

Scientific seminar "Formation and development of special representations of students." Mat. v shkole no.1085 Ja-F '61. (MIRA 14:3)
(Mathematics--Study and teaching)

POSTNOV, A.A. (Moskva)

Studying the topic "Surface and volume of the right prism" in
eight-year schools. Mat. v shkole no.5:14-21 S-O '61. (MR 14:10)
(Geometry---Study and teaching)

L 64140-65 EWP(m)/EWA(h)/EWA(c)/EAT(l)/FCS(k)/EWA(d) WW

ACCESSION NR: AP5019061

UR/0286/65/000/012/0087/0088
681.26

AUTHOR: Zimenkov, V. I.⁵⁵; Postnov, A. I.⁵⁵

27
B

TITLE: Electric balance for measuring short-duration processes in shock tubes.
Class 42, No. 172081

9m, 55

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 87-88

TOPIC TAGS: shock tube, measuring apparatus, electric balance

ABSTRACT: The proposed balance contains a velocity sensor with a differentiating circuit at the output which is fastened to the model under investigation by brackets. To prevent tube vibration from affecting measurements, the balance unit is suspended by elastic links from the stationary housing of the balance (see Fig. 1 of Enclosure). Orig. art. has: 1 figure.

[BP]

ASSOCIATION: none

SUBMITTED: 02Jan64

ENCL: 01

SUB CODE: IE

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4065

Card 1/2

L 64140-65

ACCESSION NR: AP5019061

ENCLOSURE: 01

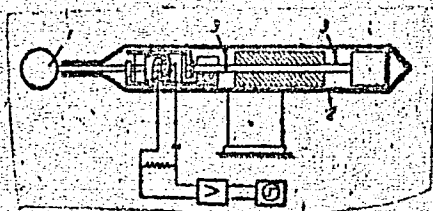


Fig. 1. Electric balance

1 - Test model; 2 - stationary
balance housing; 3 - elastic
links.

Card ^{KC} 2/2

POTAPOV, M.I.; POSTNOV, A.V., inzh.

Results obtained from the adoption of the De-Smet extraction unit.
Masl.-zhir.prom. 25 no.12:26-29 '59. (MIRA 13:4)

1. Rostovskiy-na-Donu maslozhirovoy kombinat "Rabochiy".
(Rostov-on-Don--Oil industries--Equipment and supplies)
(Extraction (Chemistry))

POTAPOV, M.I.; POSTNOV, A.V.

From letters to the editor. Masl.-zhir.prom. 26 no.7:47 J1 '60.
(MIRA 13:6)

(Extraction apparatus)

FOMKINSKIY, L.I., inzh.; POSTNOV, A.V.

Valuable contribution to marine heat engineering ("Heat calculation for marine steam engines, based on the theory of similitude" by V.V. Lakhanin. Reviewed by L.I. Fomkinskii, A.V. Postnov). Rech.transp. 18 no.3:56-3 of cover. Mr '59. (MIRA 12:4)

(Heat engineering)
(Marine engines)
(Lakhanin, V.V.)

< POSTNOV, A., kand.tekhn.nauk

Transportation problems to be solved by cybernetics. Rech.transp.
21 no.11:12-13 N '62. (MIRA 15:11)
(Inland water transportation) (Cybernetics)

DAVYDOV, Vadim Vasil'yevich, prof., doktor tekhn. nauk. Prinimal uchastie VOLOV, D.I., kand. tekhn. nauk; VOYEVODIN, N.F., prof., doktor tekhn. nauk, retsenzent; POSTNOV, A.V., kand. tekhn. nauk, retsenzent; NOVIK, R.I., inzh., red.; VITASHKINA, S.A., red. izd-va; BODROVA, V.A., tekhn. red.

[Technical computations in ship-building] Tekhnicheskie vychisleniia v korablestroenii. Moskva, Izd-vo "Rechnoi transport," 1961. 246 p. (MIRA 15:1)

(Shipbuilding)

POSTMOV, A.V., Inzhener.

Defining the most advantageous conditions for the performance of
river vessel engines. Rech.transp. 16 no.5:20-23 My '57.

(MLRA 10:5)

(Marine engines)

VACANOV, Gennadiy Ivanovich, dots., kand. tekhn. nauk; SHANCHUROVA, Valentina Konstantinovna, kand. tekhn. nauk; SHERSTINSKIY, Efraim Khaimovich, inzh.; Primali uchastiye: SIROTINA, G.N., dots., kand. tekhn. nauk; POSTNOV, A.V., kand. tekhn. nauk; LESYUKOV, V.A., inzh. vodnogo transporta, dots., kand. tekhn. nauk, retsenzent; FOMKINSKIY, L.I., starshiy nauchnyy sotr., retsenzent; MAKRUZHINA, A.N., red. izd-va; RIDNAYA, I.V., tekhn. red.

[Ship propulsion; methods and examples for carrying out ship propulsion calculations]Tiaga sudov; metodika i primery vypolneniia sudovykh tiagovykh raschetov. Moskva, Rechnoi transport, 1962. 241 p. (MIRA 15:8)

1. Kafedra organizatsii dvizheniya Gor'kovskogo instituta inzhenerov vodnogo transporta (for Lesyukov). 2. Tsentral'nyy nauchno-issledovatel'skiy institut ekonomiki i ekspluatatsii vodnogo transporta (for Fomkinskiy).

(Ship propulsion)

POSTNOV, A.V., Cand Tech Sci—(diss) "Study of the effectiveness
of the use of river ^{boats} ~~boats~~ ^{during varying} ~~upon~~ ^{the} alternating modes of ~~the~~ engine per-
formance." Gor'kiy, 1958. 11 pp (Min of River Fleet RSFSR.
Gor'kiy Inst of Engineers of ^{Water} ~~River~~ Transport), 120 copies (KL,25-58,114)

-114-

POSTNOV, Anatoliy Vasil'yevich, kand. tekhn. nauk; ATLAS, Boris Aleksandrovich, kand. ekon. nauk. Prinimali uchastiye: SHAPOSHNIKOV, Ye.M., kand. tekhn. nauk; MATSVEYKO, A.N., inzh.; STOLBOV, A.G., inzh.; GDALEVICH, S.S.; ALEKSANDROV, V.V., inzh.; NEVOLIN, V.V., inzh. retsenzent; KUZNETSOVA, L.N., retsenzent; DROZDOV, B.M., nauchn. red.; MAKRUISHINA, A.N., red.

[Use of computing techniques in water transportation] Pri-
menenie vychislitel'noi tekhniki na vodnom transporte. Mo-
skva, Transport, 1965. 215 p. (MIRA 18:7)

1. Kafedra ekspluatatsii Novosibirskogo instituta inzhenerov
vodnogo transporta (for Drozdov).

9,4230
9,9000 (incl. 2205, 2305)
9,1300 (also 1130)

21580
S/109/60/005/010/003/031
E033/E415

AUTHOR: Postnov, G.A.

TITLE: Wave Propagation in an Isotropic Plasma Waveguide

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol.5, No.10,
pp.1598-1602

TEXT: This article is a theoretical investigation into the propagation of electromagnetic waves in waveguides filled with plasma. The idealization, made in previous literature, that the plasma electron concentration N is uniform over the waveguide cross-section is not assumed. If the plasma is excited by a constant or high-frequency discharge and if, to avoid non-linear effects, the high-frequency energy is small, then a dynamic equilibrium is established in the waveguide between the collision ionization due to the electric field and volume recombination and diffusion at the waveguide walls. The latter reduces the electron concentration at the walls. Since the dielectric permittivity is related to the concentration by the formula

$$\epsilon = 1 - \frac{4\pi e^2 N}{m\omega^2}$$

Card 1/4

21580

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Wave Propagation in ...

it follows that ϵ is a function of the waveguide coordinates.
For an inhomogeneous medium, Maxwell's equations take the form

$$\text{rot } \vec{E} = jk\vec{H}; \quad \text{rot } \vec{H} = -jk\epsilon\vec{E} \quad (\text{assuming } \mu = 1)$$

Substituting one equation in the other,

$$\Delta \vec{E} + k^2 \epsilon \vec{E} - \text{grad div } \vec{E} = 0 \quad (1)$$

From the condition of plasma quasi-neutrality

$$\text{div}(\epsilon \vec{E}) = 0 \quad \text{or} \quad \epsilon \text{div } \vec{E} + \vec{E} \text{ grad } \epsilon = 0$$

and Eq.(1) can be rewritten

$$\Delta \vec{E} + k^2 \epsilon \vec{E} - \text{grad} \left[-\frac{1}{\epsilon} (\vec{E} \text{ grad } \epsilon) \right] = 0. \quad (2)$$

similarly

$$\Delta \vec{H} + k^2 \epsilon \vec{H} + \frac{1}{\epsilon} [\text{grad } \epsilon \text{ rot } \vec{H}] = 0. \quad (3)$$

Card 2/4

21580

S/109/60/005/010/003/031
E033/E415

Wave Propagation in ...

These two equations are then applied to the three following cases and approximate solutions obtained:

1. A flat plasmonic waveguide, i.e. two infinite conducting planes with plasma between them.
2. A cylindrical waveguide with (a) an H_{01} wave and (b) an H_{11} wave.

It is shown that for the flat waveguide, the electric field is a Mathieu function of the first order. Particular values can be found from tables and hence the propagation constant can also be found. The distributions of the electric field across a waveguide section with different values of concentration N are illustrated and it can be seen that, commencing at some particular value of N_0 , a "gap" appears in the field at the centre of the waveguide. The results also show that the phase velocity is less with non-uniform concentration than with uniform concentration. The field in a cylindrical waveguide also has a "gap" in the field at the centre but the phase velocity is greater than in a uniformly filled waveguide. Numerical results for a 3 cm wavelength H_{11} wave in a cylindrical waveguide are tabulated. A general conclusion is that for small values of plasma concentration, the

Card 3/4

21580

Wave Propagation in ...

S/109/60/005/010/003/031
E033/E415

values of the propagation constant agree with those calculated on the assumption of average concentration but with large values of N , when ϵ at the axis becomes zero, the values begin to differ. There are 1 figure, 1 table and 3 Soviet references.

SUBMITTED: November 16, 1959

Card 4/4

Wave Propagation

70. Award Presented for "Labarov Effect"

The Labarov Effect," by N. Labarov, Moscow, Radiotekhnika i Elektronika, 16 Nov 50, p. 1

On 15 November 1950, candidate of technical sciences N. N. Labarov was awarded the following discovery: "Radionaves reflected from the ionosphere", upon receiving the award, partially reflected by its surface, whereas the reflected waves are directed away from the source of radiation where it may be recorded.

Labarov's work lays the basis for the method of "return-oblique ionospheric sounding" (VIZ), which is a new method for studying the ionosphere and radio wave propagation. It will make possible an increase in the stability of radio communications and radio broadcasting by short waves and facilitate rapid and positive communication between all continents.

At the meeting during which Labarov received his award, it was pointed out that the ionosphere is a natural waveguide. In 1949, the Cornell of Moscow USSR had received its first award, 1950, awarded by a group of scientists at the Institute of Atomic Energy, L. D. Labarov, S. L. Luk'yanov, I. Podgornyy, V. G. Slutsin, and N. P. Filipenko. In the study of high-temperature plasma, they detected a phenomenon of electron reflection which has been hitherto unknown. This reflection originates in a plasma formed by passing powerful current pulses through discharges.

71. Wave Propagation in Plasma-Filled Waveguide Examined

"Wave Propagation in an Isotropic Plasma Wave Guide," by G. A. Pridmore, Moscow, Radiotekhnika i Elektronika, Vol. 7, No. 10, Oct-Nov 1950, 1596-1602

The article examines the question of propagation of electromagnetic waves in a wave guide filled with an isotropic plasma, assuming that the concentration of electrons changes through the cross-section of the wave guide. A rigorous solution is obtained for the case of a flat wave guide; for a cylindrical wave guide, an approximate solution is obtained by two different methods, and results are tabulated.

Results show that for a certain value of electron concentration along the walls, the central region in the wave guide becomes completely reflecting and no electromagnetic waves can propagate. If the wave is a circular wave guide, propagation of electromagnetic waves in plasma wave guides continues even at very high electron concentration and when the plasma column completely reflects waves laterally incident on it.

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D207/D304

9,1300

AUTHOR: Postnov, G.A.

TITLE: Conditions of slow wave existence in an isotropic plasma waveguide

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 8, 1961,
1325 - 1327

TEXT: One method of obtaining a slow wave, i.e. a wave whose number is greater than that of the wave propagated in free space, is by putting a stratified dielectric across the axis of a cylindrical waveguide. The other method of retardation is by filling the waveguide by a gyrotropic plasma; this method requires considerable magnetic fields in the centimeter region making it impracticable. It is possible to retard the wave without the magnetic field by applying the principle of stratification, e.g. by utilizing plasma inhomogeneities. In order to obtain slow waves another surface has to be introduced into the waveguide which would change the electron concentration and consequently change the permittivity of its
Card 1/5

Conditions of slow wave ...

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D207/D304

plasma. In the present article the author solves the problem of such a waveguide. He considers a flat waveguide with plasma (Fig.1) with a thin dielectric membrane equidistant from its walls. If the diaphragm has its permittivity near to unity, then it does not introduce any appreciable distortion of the field and the fall rate of plasma concentration in its vicinity will be practically the same as at the wall. Approximating the distribution N by a cosinusoid

$$N = N_0 \left| \sin \frac{\pi y}{2b} \right| \quad (2)$$

is given where $2b$ is the distance between the walls of the flat waveguide as shown in Fig. 1. After substituting and using the Floquet theorem, the general solution of a Hill equation is

$$E_x = A e^{\mu \zeta} \Phi(\zeta, \sigma) + B e^{-\mu \zeta} \Phi(\zeta, -\sigma),$$

where σ - is a parameter. Function Φ can be represented also as a

Card 2/5

Conditions of slow waves ...

S/109/61/006/008/007/018
D207/D304

trigonometrical series with σ as phase. The boundary conditions require that E_x be an even function, which means that $B = 0$. Using

$$\theta_0 = 1 - \theta_2 - \frac{1}{8} \theta_2^2 - \frac{1}{4} \theta_2 \theta_4 - \frac{1}{8} \theta_4^2 - \dots \quad (6)$$

or substituting the values of coefficients

$$\left(\frac{2b}{\pi}\right)^2 \left[k^2 - h^2 - \frac{4q}{\pi}\right] = 1 - 0,4264q - 0,0783q^2 - 0,0001q^3 - \dots$$

is obtained. The dependence of $(k^2 - h^2)$ on parameter q , at 3 cm wavelength is given with the same dependence shown for a flat waveguide without dielectric. It may be seen that starting with $q = 5.56$ slow waves start to appear in the waveguide which corresponds to the concentration $N_0 = 4.24 \cdot 10^{12} \text{ cm}^{-3}$. The above proof is of interest because Ya.B. Faynberg and N.A. Khizhnyak (Ref. 1: ZhTF, 1955, 25, 4, 711) have proved that when a waveguide is filled

Card 3/5

Conditions of slow wave ...

S/109/61/006/008/007/018
D207/D304

with a substance with step changes in ϵ , the only slow waves possible are electric not magnetic. The author acknowledges helpful criticism from Ya.B. Faynberg. There are 2 figures and 3 Soviet-bloc references.

SUBMITTED: February 22, 1960

Card 4/5

POSTNOV, G.A.

Conditions for the existence of slow waves in an isotropic wave
guide. Radiotekh. i elektron 6 no.8:1325-1327 Ag '61. (MIRA 14:7)

(Magnetic waves) (Wave guides) (Microwaves)

POSTHOV, G.A.

Propagation of electromagnetic waves in an isotropic plasma wave
guide. Radiotekh. i elektron. 5 no.10:1598-1602 0 '60.

(MIRA 13:10)

(Wave guides)

POSTNOV, G.A.; YEFIMOV, O.N.; MILEYEV, V.S.; SOKOLINSKIY, Ye.A.

Observations of Mars in 1950. Biul.VAGO no.12:12-15 '53.

(MIRA 7:3)

1. Moskovskoye otdeleniye VAGO, otdel planet i luny.

(Mars (Planet))

POSTNOV, I. G.

Lineynyy nadsmotrshchik gorodskoy telefonnoy seti (City telephone systems lineman, by) N. N. Luzhetskiy, I. G. Postnov, A. I. Semenov (i) S. I. Zavarzin. 2. izd. ispr. i dop. Moskva, Svyaz'izdat, 1953. 383 p. illus., tables. "Literatura": p. (402) At head of title: Posobiya dlya svyazistov massovykh professiy.

SO: N/5
753.411
.I9
1953

POSTNOV, I.G.

Eliminate without delay the shortcomings in servicing the
public. Vest. svyazi 21 no.9:27-28 S '61. (MIRA 14:9)

1. Nachal'nik inspeksii pri ministre svyazi RSFSR.
(Tambov Province--Telecommunication)

POSTNOV, I. G.

LUZHETSKIY, N.N.; POSTNOV, I.G.; SEMENOV, A.I.; ZAVARZIN, S.I.; KORO-
BOV, Yu.M., redaktor; SOKOLOVA, R.Ya., tekhnicheskiy redaktor.

[City telephone system lineman] Lineinyi nadsmotrshchik gorodskoi
telefonnoi seti. 2. izd., ispr. i dop. Moskva, Gos. izd-vo lit-
ry po voprosam aviatsii i radio, 1953. 406 p. (MIRA 7:7)
(Telephone)

POSTNOV, I.G.

The telecommunication workers of Rostov Province should improve service to the public. Vest. svyazi 22 no.10:14-17 0 '62.
(MIRA 15:11)

1. Nachal'nik Inspektzii pri ministre svyazi RSFSR.
(Rostov Province--Telecommunication)

POSTNOV, I.G.

LUZHETSKIY, N.N.; POSTNOV, I.G.; SEMENOV, A.I.; ZAVARZIN, S.I.;
KOROBОВ, Yu.M., redaktor; MOROZOVA, T.M., tekhnicheskij redaktor.

[Line supervisor of city telephone systems] Lineinyi nadzotrshchik
gorodskoi telefonnoi seti. Moskva, Gos.izd-vo lit-ry po voprosam
svyazi i radio, 1951. 394 p. (MLRA 9:1)
(Telephone)

POSTNOV, I.G.

LUZHETSKII, N.N.; POSTNOV, I.G.; SEMENOV, A.I.; ZAVARZIN, S.I.;
KOROBV, Yu.M., redaktor; SOKOLOVA, R.Ya., tekhnicheskiy re-
daktor.

[Linemen of a city telephone system] Lineinyy nadzornshchik
gorodskoi telefonnoi seti. 2 izd., ispr. i dep. Moskva, Gos. izd-
vo lit-ry po voprosam svyazi i radio. 1953. 406 p. (MLRA 7:8)
(Telephone)

POSTNOV, I.Ye.

Acclimatizing the whitefish *Coregonus peled* in Gorkiy Reservoir.
Priroda 51 [i.e. 52] no.5:113 '63. (MIRA 16:6)

1. Gor'kovskiy gosudarstvennyy universitet.
(Whitefishes)

POSTNOV, L.M.

PLANS 1 BOOK LECTURE: 307/443
Serebrianyi po teorii litseynih protsessov, M.

Teoriya protsessov metallizatsii i tverdye spetsialnye (Shrinkage Processes in Metals: Transactions of the Third Conference on the Theory of Casting Processes) Moscow, AN SSSR, 1960. 261 p. Extra slip inserted. 3,000 copies printed.

Spetsialnyy Agentyi, Akademika nauk SSSR, Institut mashinostroyeniya, Komsolysy po tekhnologii mashinostroyeniya.

Prof. M.I. B.B. Gulyayev, Doctor of Technical Sciences, Professor; M. of Publishing House; V.S. Shchegolev, Tech. M.I. T.T. Polyakov.

PREFACE: This collection of articles is intended for scientific workers, engineers, technicians of scientific research institutes and industrial plants, and for faculty members of schools of higher education.

CONTENTS: The collection contains technical papers presented at the Third Conference on the Theory of Casting Processes, organized by the Institute of Metallurgy and Technology of the Academy of Sciences of the USSR (Casting Section of the Commission for Machine-Building Technology of the Institute of Science of the Academy of Sciences of the USSR) and by the Institute of Metallurgy of the USSR Academy of Sciences (Institute of Metallurgy of the USSR Academy of Sciences).

The most serious defects in castings, defects, and welds as a result of metal shrinkage are discussed. Papers contributing to the formation of shrinkage defects are presented. The papers are divided into two groups: the first group contains papers on the theory of shrinkage defects and the second group contains papers on the analysis of shrinkage defects along with measures taken to prevent and remedy them. The primary causes of shrinkage defects and the process of solidification of metals are discussed. Also presented are resolutions adopted at the Conference with regard to the problem of shrinkage in metals. No personalities are mentioned. Most papers are accompanied by bibliographic references, the majority of which are Soviet.

TABLE OF CONTENTS:

Foreword

Gulyayev, B.B. The Problem of Shrinkage Processes in Metals 3

I. SHRINKAGE DEFECTS

Vasilyuk, O.M., and E.B. Gulyayev. Influence of Solidification Conditions on the Formation of Shrinkage Cavities in Steel Castings 19

Kaban, I.N. Casting Properties of Heat-Resistant Alloys 50

Rockner, M.J., and G.S. Shchegolev. Experimental Investigation of Shrinkage Phenomena in Iron Castings With Spheroidal Graphite 57

Shchegolev, G.S. Molten Metal and Alloy Shrinkage and Its Determination 65

II. SHRINKAGE POROSITY

Postnov, L.M., and B.B. Gulyayev. Metal Shrinkage Porosity in Walls of Sand Castings 72

Trigor, Y.I., and I.V. Komolova. Investigation of Shrinkage Porosity in Steel Castings 85

Polonov, E.H., and A.A. Dedinger. Investigation of the Effect of Pressure on the Development of Defects in Ductile Alloy Castings 97

Aliev, M.B. On the Increase in the Density of Aluminum Alloy Castings 112

Davut, M.T., and T.M. Bilbayev. Porosity in Castings of Alloys of the Magnesium-Aluminum-Zinc System 121

III. CRACKS IN CASTINGS AND WELDED JOINTS

Troshchyn, M.A. Effect of Some Metallurgical and Manufacturing Factors on the Formation of Hot Cracks in Steel Castings 133

Guglin, M.A. On Hot Cracks in Castings 141

Boydellakhi, A.L., and Y.V. Bilbayev. Study of Causes of Subsurface Flare Formation in High-Alloy Steel Ingots 147

Artes, V.S. Shrinkage Phenomena in Continuous Steel Ingots 152

Serov, A.I. The Connection Between the Cooling Regime of a Continuous Ingot and the Formation of Cracks and Flares 163

Card 4/6

S/123/61/000/003/016/023
A004/A104

AUTHORS: Postnov, L. M., and Gulyayev, B. B.

TITLE: Axial shrinkage porosity in the walls of steel castings

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 3, 1961, 21, abstract 3G179. (V sb. "Usadochn. protsessy v metallakh". Moscow, AN SSSR, 1960, 74-84)

TEXT: The authors give a brief description of the kinds of porosity depending on the formation conditions: dispersed, axial and local porosity. The process of formation of axial shrinkage porosity is investigated, which is the main cause of a decrease in mechanical properties of the metal in the casting walls. When the limit of metal consumption through the wall cross section becomes less than the consumption determined by the shrinkage conditions, the continuity of the flow is changed by local metal displacements. The advent of this moment determines the general density of the casting. A mathematical analysis of the phenomena based on the thermal laws of solidification and filtration theory, confirmed by a great number of experiments whose results have been worked out by methods of mathematical statistics, make it possible to obtain

Card 1/2

POSTNOV, L. M.

"The Effect of Fillet Radii on the Formation of Defects in Junctions."

in book - Improving the Quality of Steel Castings; Transaction of the All-Union *Trans*
Conference, Moscow, Mashgiz, 1958. 214 p.

Abstract: The author gives criteria for selecting fillet radii in various cases.
There are 3 references, all Soviet.

GULYAYEV, B. B., (Prof., Dr. Tech. Sci.) POSTNOV, L. M. (Engr.) ZOTOV, M. V. (Engr.)

"Shrinkage Porosity and Means of Dealing with it."

in book - Improving the Quality of Steel Castings; Transaction of the All-Union Conference, Moscow, Mashgiz, 1958. 214 p.

Abstract: Various types of porosity are discussed, methods of detecting them are explained, and measures for preventing porosity are described.

Some measures involve changes in design, while others are accomplished by improved techniques.

POSTNOV, L. M.

Leningrad. Politechnicheskii Institut

PAGE 1 BOOK EXFILTRATION 80V/4199

Soyuznuyu dostizheniya liternogo proizvodstva: trud
mechuvoy nauchno-tekhnicheskoy kontseptsii (Recent
Achievements in Founding: Fundamental Concepts of the Scientific
and Technical Conference of Scientists of Higher Education)
Moscow, Mashin, 1990. 336 p. Krate slip inserted.
1,000 copies printed.

Red. Ed.: Ye. A. Nezhdeni, Doctor of Technical Sciences,
Professor, Ed.: M. G. Dirshevi, Doctor of Technical
Sciences, Professor, and K. P. Lebedev, Doctor of Technical
Sciences, Professor on Heavy Machine Building (Leningrad
Department, Mashin); Ye. P. Naumov, Engineer, Tech. Ed.:
Ye. A. Dugobinskiy, and L. V. Shchetinina.

PURPOSE: This book is intended for the technical personnel
of foundries. It may be used by students of the field.

COVERAGE: This collection of articles discusses problems in
foundry processes. Individual articles treat the melting
of metals and their alloys, mechanization and automation
of casting processes, aspects of the manufacture of steel,
cast iron, and nonferrous metal castings. No personalities
are mentioned. References accompany individual articles.

4. Mezhlinder, O. M., and B. B. Olyuzev. Investigation of
the method of solidification in casting. 25
 5. Plunov, M. V. Behavior of suspended architectures During
crystallization. 32
 6. Rabinovich, Ye. Z. Mechanism of Molten Metal Flow. 35
 7. Danilov, Y. M. Casting Properties and the Selection of
the Method of Pouring the 235 type (Oxide) Pila-forming
Alloys. 41
 8. Rabinovich, B. Y. Hydraulics in Casting Systems. 46
 9. Bolshakov, L. M. Theory of Shrinkage Porosity. 61
- II. MECHANIZATION AND AUTOMATION IN FOUNDRY
10. Stetsopal, Y. M. New Methods in Planning Casting Shops
and Plants. 77
 11. Yegorovskiy, A. P. Development of the Manufacture of
Foundry Machinery. 91
- Card 3/9

GULYAYEV, Boris Borisovich. Prinimali uchastiye: SHAPRANOV, I.A., kand.tekhn. nauk; MAGNITSKIY, O.N., kand.tekhn.nauk; POSTNOV, L.M., kand.tekhn. nauk; BOROVSKIY, Yu.F., kand.tekhn.nauk; KOLACHEVA, O.V., kand. tekhn.nauk. BERG, P.O., prof., doktor tekhn.nauk, zasluzhennyy deyatel' nauki i tekhniki, retsenzent; PROZHOGIN, A.A., nauchnyy red.; CHFAS, M.A., red.izd-va; KONTOROVICH, A.I., tekhn.red.; SPERANSKAYA, O.V., tekhn.red.

[Founding processes] Liteinye protsessy. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 415 p.

(MIRA 13:7)

(Founding)

GULYAYEV, B.B., POSTNOV, L.M., BOROVSKIY, Yu.F.

Scabs on steel castings. Lit. proizv. no.6:25-29 Je '60.
(MIRA 13:8)

(Steel castings)
(Foundries--Quality control)

POSTNOV, L. M.

POSTNOV, L. M., ENGINEER: AND GULYAYEV, B. B., Doctor of Tech. Sci, Prof.,
"Investigation of the Effect of Metal Solidification during the Filling of
the Mold on the Quality of Steel Castings." in book Solidification of Metals,
Transaction of 2nd Conf. on Theory of Foundry Processes (56);
Moscow, Mashgiz, 1958, 532pp.

POSTNOV, L.M.

Experience in producing castings from acid-resistant steel for the
pulp and paper industry. Lit.proizv. no.8:7-8 E '54. (MLRA 8:1)
(Steel castings) (Paper industry)

Postnov, L.M.

21(8)	ISSUE I 1966 INFORMATION	205/176
Vsesoyuznyy nauchno-issledovatel'skiy tsentr po primeneniyu radioizotopov i izucheniyu izotopov i izucheniyu v nauchnoy i promyshlennoy sferakh Yazyk i nauka Moscow, 1967.		
Trudy. Nauchno-issledovatel'skiy tsentr po primeneniyu radioizotopov i izucheniyu izotopov i izucheniyu v nauchnoy i promyshlennoy sferakh. (Transactions of the All-Union Scientific Center for the Application of Radioisotopes and Study of Isotopes and Their Use in Science and Industry. Instrument Manufacture) Moscow, Izdatel'stvo AN SSSR, 1966. 358 p. 4,500 copies printed.		
Sponsoring Agencies: Vuzov. Glavnoye upravleniye po ispol'tovaniyu atomnoy energii, and Akademiya nauk SSSR.		
Editorial Board of Set: V.I. Dikshin, Academician (Resp. Ed.), M.M. Shumilovskiy (Deputy Resp. Ed.), Yu. S. Zaslavskiy (Deputy Resp. Ed.), L.I. Tatchenko, S.I. Verkhovskiy, S.T. Mazurov, L.I. Petrukhin and M.G. Zeleninskaya (Secretary).		
Ed. of Publishing House: P.M. Belyunin; Tech. Ed.: P.P. Polonova.		
PURPOSE: This book is intended for specialists in the field of machine and instrument manufacture who use radioactive isotopes in the study of materials and processes.		
CONTENTS: This collection of papers covers a very wide field of the utilization of isotopes in the field of industrial research and control techniques. The topic of this volume is the use of radioisotopes in the machine and instrument-making industry. The individual papers discuss the applications of radioisotope techniques in the study of metals and alloys, problems of production and lubrication, metal cutting, engine performance, and defects in metals. Several papers are devoted to the use of radioisotopes in the automation of industrial processes, recording and measuring devices, quality control, flowmeters, level gauges, safety devices, radiation counters, etc. These papers represent contributions of various Soviet institutions and laboratories. They were published as transactions of the All-Union Conference on the Use of Radioisotopes and Their Use in Science and Industry, April 1967. No personalities are mentioned. References are given at the end of most of the papers.		
Chernyakova, R.B. Method for Estimating the Degree of Degradation of Metals 108		
Gulyayev, R.P., Yu.P. Borovskiy, L.M. Postnov, O.M. Nagmitadskiy. Study of the Processes of Cast Formation in Sand Molds 112		
Vitkin, A.L. (Vsesoyuznyy nauchno-issledovatel'skiy institut Chernoy Metallurgii - Central Scientific Research Institute of Ferrous Metallurgy). Study of the Mechanism of the Basic Process in Hot Tin Plating 119		
Jordan, O.O., and K.S. Furman (Nauchno-issledovatel'skiy institut Teploenergeticheskogo priborostroyeniya - Scientific Research Institute of Heat-Power Instruments). Use of Nuclear Radiation for the Measurement of Heat-Power Parameters 124		
Verkhovskiy, S.I., V.A. Sotnikov, and V.Y. Yushkin (Fizicheskii institut imeni P.N. Lebedeva - Institute of Physics imeni P.N. Lebedev, Academy of Sciences, USSR). Reduction of Errors in Measurements Performed With Scintillation Counters 127		
Korotkova, V.A. (Fizicheskii institut imeni P.N. Lebedeva - Institute of Physics, Academy of Sciences, USSR). Radiation in Analytical Methods 134		
Afanas'yev, V.M. Automation of Measurements and Recording of Radioactive Radiation Intensity 140		
Talichkin, V.O. Study of the Electrical Properties of Ionization Resistors 146		
Segal, V.O., and A.A. Rudakovskiy (Vsesoyuznyy nauchno-issledovatel'skiy institut Chernoy Metallurgii - Central Scientific Research Institute of Ferrous Metallurgy). Use of Radioactive Isotopes in the Automation of Excavating and Drifting Machines 150		
Jordan, O.O., and K.S. Furman (Nauchno-issledovatel'skiy institut Teploenergeticheskogo priborostroyeniya - Scientific Research Institute for Heat-Power Instrument Making). Measuring the Density of Liquids With Gamma Radiation 153		

SOV/123-59-15-60468

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 15, p 223 (USSR)

AUTHORS:

Postnov, L.M., Gulyayev, B.B.

TITLE:

Investigations of the Effect of Metal Solidification During the Mold Filling Process on the Quality of Steel Castings

PERIODICAL:

V sb.: Zatverdevaniye metallov. Moscow, Mashgiz, 1958, pp 374 - 396

ABSTRACT:

Owing to the heating effects of the flow of overheated metal the solidification of castings in the zones (Z) near the gate is taking place more slowly; even the smelting of the solid skin, forming at the beginning, might occur. These Z solidified late might even get isolated from the supply sources (gate systems, heads) and therefore develop into Z of the greatest shrinkage porosity. Investigations were carried out for a quantitative analysis of the mentioned phenomena as applied to plate castings of carbon steel. The rated formulae are derived and the results of the tests for the determination of the duration of the solidification process and the density of the castings in the Z near the gates are stated. Particularly the distribution of the density and σ_b over the length of plates with dimensions of 1,100 · 325 mm and thicknesses of 10, 20, 30,

Card 1/3

SOV/123-59-15-60468

Investigations of the Effect of Metal Solidification During the Mold Filling Process
on the Quality of Steel Castings

and 50 mm, cast in vertical and horizontal positions, was determined. Besides, in these tests the temperature and speed of casting, the quantity of metal which was poured through the gates (for this the number of gates and the size of the heads were varied) and the relative layout of gate and heads were varied. The density was determined by X-raying and gravimetric analysis of cut-out templets. A decrease in density was always accompanied by a corresponding reduction of σ_b . With horizontal casting the Z of porosity was more extensive than with vertical casting, e.g. for a cast plate of 30 mm thickness the porosity zone started at a distance of 60 - 80 mm from the gate and spread out over the length of the plate up to 200 - 300 mm. The contour of the porosity Z corresponds to the shape of the flow when flowing out under a submerged level (the Z expands in the shape of a fan in direction from the gate). A rise of the temperature of the metal and an increase in its quantity, poured through the gate, leads to a considerable reduction of the density of the casting in the Z near the gate. The effects of the casting speed and the thickness of the casting are slight. Based on the investigations, practical recommendations for avoiding the porosity in steel castings in the Z near the gate are

Card 2/3

SOV/123-59-15-60468

Investigations of the Effect of Metal Solidification During the Mold Filling Process on the Quality of Steel Castings

given: casting in a vertical position, dispersed metal supply, adjustment of the heads above the gates (or at least at no greater distance than 2-3 times wall thickness), casting temperature as low as possible. 22 figures.

O.S.M.

Card 3/3

POSTNOV, M. A.

Kalendarnoe planirovanie liteinogo proizvodstva. Moskva, Mashgiz, 1950. 155 p.
forms.

Refers to the Kirov plant in Leningrad.

Scheduling foundry production.

DLC: .TS238.F6

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of
Congress, 1953.

POSTNOV, M.T.

Compact liquid-fuel heaters. Gor.khoz.Mosk. 33 no.11:
29-30 N '59. (MIRA 13:2)

(Heating)

POSTNOV, M. T.

Spetsialnie Avtomobili (Special Type Vehicles), Moscow-Leningrad, 1949.

31

31

Solid elastic polymers from ethylene. A. I. Dintevs and S. I. Postnov. Russ. Zh. Khim., Feb. 28, 1941. C_2H_4 is fed into a vessel contg. H_2O under a pressure in excess of 1000 atm. and at a temp. in excess of 100° , to effect polymerization.

STRUCTURAL LITERATURE CLASSIFICATION

POSTNOV, F.F.

Case of osteopoikilosis observed through a 15-year period. Vest,
rent. i rad. 39 no.4:74-75 J1-Ag '64. (MIRA 18:7)

1. Khirurgicheskoye otdeleniye (zav. - zasluzhennyy deyatel' nauki
prof. I.L.Fayerman (deceased)) Tsentral'nogo nauchno-issledovatel'skogo
instituta ekspertizy trudosposobnosti i organizatsii truda invalidov,
Moskva.

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